

Title (en)  
POROUS CERAMIC AND PROCESS FOR PRODUCING THE SAME

Title (de)  
PORÖSES KERAMISCHES MATERIAL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
CERAMIQUE POREUSE ET SON PROCEDE DE FABRICATION

Publication  
**EP 0657403 B1 20011205 (EN)**

Application  
**EP 94917794 A 19940608**

Priority  
• JP 9400941 W 19940608  
• JP 16750693 A 19930614  
• JP 14542594 A 19940602

Abstract (en)  
[origin: US5750449A] A ceramic porous body composed principally of silicon carbide or silicon nitride which has higher strength, higher heat resistance and higher thermal shock resistance and has a large number of fine pores, and a method of producing the same. The ceramic porous body, comprised principally of silicon carbide or silicon nitride, has a pore diameter of not more than 1  $\mu$  m, with a porosity of not less than 35%, and has a flexural strength of not less than 100 MPa. The ceramic porous body is produced by using a silicon oligomer which is capable of producing silicon carbide or silicon nitride when calcined, mixing the silicon oligomer with a silicon carbide powder or silicon nitride powder, and/or other ceramic powder which has a mean particle diameter of not more than 1.0  $\mu$  m, molding the mixture into shape, then sintering the molding in a suitable atmosphere at temperatures of not less than 1200 DEG C.

IPC 1-7  
**C04B 38/00**

IPC 8 full level  
**C04B 35/571** (2006.01); **C04B 35/589** (2006.01); **C04B 38/00** (2006.01); **C04B 38/06** (2006.01)

CPC (source: EP US)  
**C04B 38/00** (2013.01 - EP US); **C04B 38/0022** (2013.01 - EP US); **C04B 38/0051** (2013.01 - EP US)

Cited by  
FR2776287A1; US7759276B2; EP1741687A1; US7867313B2; US7648932B2; EP1741685A1; EP0684218B1; WO9948840A1; US6573208B1; US7199067B2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**US 5750449 A 19980512**; DE 69429323 D1 20020117; DE 69429323 T2 20020718; EP 0657403 A1 19950614; EP 0657403 A4 19970514; EP 0657403 B1 20011205; JP 3596910 B2 20041202; JP H07187845 A 19950725; US 5759460 A 19980602; WO 9429238 A1 19941222

DOCDB simple family (application)  
**US 77143196 A 19961220**; DE 69429323 T 19940608; EP 94917794 A 19940608; JP 14542594 A 19940602; JP 9400941 W 19940608; US 82013397 A 19970319